



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/039,527	11/07/2001	Donald K. Wright	021276-9053-03	8833

7590 02/26/2004

Michael Best & Friedrich LLC
Suite 1700
401 North Michigan Avenue
Chicago, IL 60611

EXAMINER

PIAZZA CORCORAN, GLADYS JOSEFINA

ART UNIT	PAPER NUMBER
1733	

DATE MAILED: 02/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

AS

Office Action Summary	Application No. 10/039,527	Applicant(s) WRIGHT ET AL.	
	Examiner Gladys J Piazza Corcoran	Art Unit 1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 15-21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>November 10, 2003</u> . | 6) <input type="checkbox"/> Other: _____ |

FINAL ACTION

Election/Restrictions

1. Applicant's election of Group I, claims 1-14 in the Paper filed November 10, 2003 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 15-21 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Group II, there being no allowable generic or linking claim. Election was made **without** traverse in the Paper filed November 10, 2003.

Drawings

3. The drawing amendment received on November 10, 2003 is accepted

Claim Objections

4. Claim 8 is objected to because of the following informalities: Claim 8 recites "the web section if perforated" which should be -- the web section is perforated --. Appropriate correction is required.
5. Claim 5 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Applicant's amendment to claim 1 added all the limitations of claim 5 to claim 1, thus claim 5 no longer further limits the claim.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. Claim 1 recites in the preamble, "A method of making a reclosable plastic bag." While Applicant has amended the claim to include the step of "sealing the selected portion of the zipper tape to a web," the claim continues to be unclear because there are no actual steps for making a reclosable bag in the body of the claim. It is suggested to amend the claim to either recite, "In a method of making a reclosable bag" or to include the step of "forming a reclosable bag".

9. Claims 6-10 recite the limitation "the web section". There is insufficient antecedent basis for this limitation in the claims. It appears that Applicant left out the step of "positioning a section of the web above the platform" from the original claim 6. It is suggested to add these limitations back into the claim.

10. Claim 13 recites the limitation "the sensor" twice in line 3. There is insufficient antecedent basis for this limitation in the claim. It is suggested to amend to --the optical sensor-- as amended in the other claims.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 1733

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

13. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blohowiak (US Patent No. 6,003,582) in view of Ishikawa (US Patent No. 4,594,925) and further in view of Makkonen (US Patent No. 4,773,760) as taken with Matsuguchi (US Patent No. 5,895,552).

As to claim 1, Blohowiak shows a method of making a reclosable plastic bag by feeding a zipper tape having at least one splotched portion and actuating a cutter for cutting the zipper tape in the splotched portion to form an individual zipper and sealing the portion of the zipper tape to a web (column 8, lines 7-34; column 10, lines 18-21).

As to claim 6, Blohowiak discloses a method for sealing a portion of a zipper tape (170) to a web (28) where the zipper tape having a splotch along its length that has a thickness less than the zipper tape thickness (column 7, lines 20-26), by providing an elevator (turret 308) having a platform (326) for receiving a portion of zipper tape

Art Unit: 1733

(column 8, lines 7-46), depositing the portion of zipper tape onto the platform by feeding the zipper tape onto the platform (column 8, lines 11-13), positioning a section of the web above the platform (column 6, lines 12-20; column 10, lines 12-17) (*it is noted that this limitation appears to have been erroneously left out of the amended claim*), positioning a sealing head (352) over the web section for heating the web section (column 10, lines 18-20), and elevating the platform towards the web section until the portion of zipper tape on the platform comes into contact with the web section (the zipper platform 326 is elevated from a loading station 340 to a sealing station 348 where the zipper comes into contact with the film), thereby forming a seal between the zipper tape and the web section (column 10, lines 18-23).

It is known in the mechanical arts to provide sensors for sensing material in order to cut the material at a desired location as an equivalent alternative to "traveling" the material as far as it can to actuate the cutter as shown in Blohowiak (column 8, lines 16-19) and additionally in order to conform with differing zipper lengths for more accurate cutting. For example, Ishikawa discloses it is known in the cutting art for cutting fastener strips to provide a sensor (detecting station 1) for detecting a thinner portion or gap area of the material to be cut and a cutter (cutting station 3) for cutting the material at the thinner portion or gap area in correspondence to output from the sensor (column 2, lines 8-59). More specifically, the detector detects the thinner portion or gap of the fastener material and actuates the cutter to cut the material in the location of the thinner portion or gap. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the method and apparatus of cutting and sealing zipper

Art Unit: 1733

lengths in Blohowiak with a sensor for detecting the splotched portion (thinner portion or gap) of the zipper and cutting the zipper in response to a signal from the sensor as it is well known in the cutting arts to provide a sensor and a cutter in correspondence with the sensor in order to cut the material at the location of the splotched portion as exemplified by Ishikawa as an equivalent alternative to the method in Blohowiak and additionally in order to conform with differing zipper lengths for more accurate cutting.

Applicant has newly amended claim 1 to include that the zipper tape is fed past an optical sensor that optically detects opacity variations in the zipper tape, optically detecting the splotched portion to produce a signal and claim 6 to include feeding the zipper tape onto the platform and past an optical sensor that optically detects variations in the thickness of the zipper tape until the optical sensor detects a splotched portion in the zipper tape. As discussed above, Ishikawa discloses detecting variations in the thickness of fastener strips by feeding past a sensor that produces a signal from the detection and actuating a cutter in response to the signal. However, Ishikawa uses a mechanical sensor to detect the variations in the thickness (it is noted that the mechanical sensor is connected to an optical sensor that detects changes in the height of the mechanical sensor). It is considered well known in the sensing and controlling art to provide an optical sensor as an alternative to a mechanical sensor for detecting variations in the thickness of materials. For example, Makkonen discloses a method of detecting the thickness of a sheet of material with an optical sensor as an improvement over mechanical sensors that have the disadvantages of contacting the material to be detected thus causing erroneous results of measurements (column 1, lines 6-50).

Art Unit: 1733

Furthermore, it is also well known in the art to use optical sensors for sensing the appropriate position on the material to be cut and sending a signal to a cutter for cutting the material. For example, Matsuguchi discloses a method of feeding material past an optical sensor that actuates a cutter for cutting the material at the desired location (column 3, lines 48-60). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the method of feeding the zipper tape as shown by Blohowiak and Ishikawa by using an optical sensor as an alternative to a mechanical sensor in order to avoid the errors caused by sensors contacting the material as is well known in the art and further exemplified by Makkonen particularly since it is well known in the art to use optical sensors for actuating cutters as exemplified by Matsuguchi.

As to claims 2 and 3, the sensor in Ishikawa determines thickness of the thinner area or gap area by comparing the thickness of the thinner area or gap to a reference predetermined thickness of the zipper tape (the thicker portions of the material). Additionally, Makkonen shows detecting the thickness of material with an optical sensor by detecting changes in the opacity of the material (the amount of passage of light passed through the material as detected by the receiver). As to claim 4, Blohowiak discloses splotching the zipper tape multiple times to create a series of splotches along the length of the zipper tape (column 7, lines 20-26). As to claim 5, Blohowiak discloses sealing the selected portion of the zipper tape to a web (column 10, lines 18-21). As to claim 7, the sealing head is in contact with the web section when the portion of the zipper tape on the platform comes into contact with the web section (Blohowiak column 10, lines 18-23). As to claim 8, the web section is perforated (Blohowiak column 5, lines

Art Unit: 1733

59-65). As to claim 9, the perforation is performed by a knife positioned above the web section (Blohowiak cutter 124 column 5, line 64 to column 6, line 11; see figure 1). As to claim 10, the web section is perforated prior to the portion of zipper tape on the platform being sealed to the web section (Blohowiak column 5, line 58 to column 6, line 20; see figure 1). As to claims 11 and 12, the seal is substantially airtight and watertight (Blohowiak column 10, lines 34-44). As to claim 13, the portion of zipper tape is created by feeding a zipper tape as shown in Blohowiak and the references Ishikawa, Makkonen, and Matsuguchi show that it would have been obvious in the art at the time of the invention to feed the zipper tape until a splotted portion crosses the optical sensor thereby detecting the splotted portion to obtain a signal from the sensor and cutting the tape in response to the signal to create the portion of zipper tape on the platform as discussed above. As to claim 14, the method is repeated to seal a plurality of zipper tapes to the web and further comprising the step of winding the resulting web onto a winder (Blohowiak column 2, lines 3-13; column 12, lines 45-48).

Response to Arguments

14. Applicant's arguments filed November 10, 2003 have been fully considered but they are not persuasive.

Applicant argues on page 7 that claim 1's preamble contains the open-ended transitional phrase "comprising", thus there may be additional steps of the claimed method. Even though the claims contain open-ended language, the claims are still unclear by reciting a method for forming a reclosable bag, but not actually forming a reclosable bag in the claim. Examiner is not suggesting that all the steps must be

Art Unit: 1733

presented in the claim, merely only the step of actually forming a reclosable bag should be recited if that is what the claim is directed to. Alternatively, Applicant should amend the preamble to be consistent with the steps in the claim. It is suggested to amend the claim as discussed above.

15. As to Applicant's arguments with respect to the claims, which have been considered but are moot in view of the new ground(s) of rejection as a result of Applicant's Amendments.

Applicant argues on page 8 that the references Blohowiak and Ishikawa do not disclose an optical sensor that optically detects the thickness variations of the zipper tape as currently amended. The newly amended limitations are addressed by the newly cited references Makkonen and Matsuguchi as discussed above.

Conclusion

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of


Art Unit: 1733

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gladys J Piazza Corcoran whose telephone number is (571) 272-1214. The examiner can normally be reached on M-F 8am-5:30pm (alternate Fridays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Gladys J. Corcoran
Examiner
Art Unit 1733

GJPC